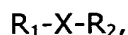


CLAIMS:

1. A serine protease inhibitor having the amino acid sequence according to SEQ ID NO: 1.
2. A fragments of the serine protease inhibitor having the amino acid sequence



wherein R_1 is NH_2 , an amino acid or a peptide with up to 100 amino acids, and R_2 is $COOH$, $CONH_2$, an amino acid or a peptide with up to 100 amino acids, and X is selected from SEQ ID NOS: 2 to 6.

3. A nucleic acid coding for a serine protease inhibitor according to either of claims 1 or 2, especially SEQ ID NOS: 7 to 12.
4. A medicament containing at least one serine protease inhibitor according to claim 1 or 2 and/or a nucleic acid according to claim 3, optionally together with pharmaceutical vehicles.
5. The medicament according to claim 4, containing from 0.01 to 1000 mg per kg of body weight of the serine protease inhibitor according to claim 1 or 2 and/or of the nucleic acid according to claim 3.
6. Use of the medicament according to claim 1 or 2 for preparing a medicament for the treatment of acute or chronic cervix inflammations, inflammations of Bartholin's glands and other vaginal regions, tonsillitis, pharyngitis and laryngitis, acute or chronic inflammatory processes accompanied by excessive formation of mucus and the resulting acute emergency situations, postoperative bleedings due to hyperfibrinolysis,

and for the prophylaxis of lung emphysema formation in deficiencies of α_1 -proteinase inhibitor.

7. Use of the medicament according to claim 4 for the therapy of asthma, AIDS, pneumonia, tumor diseases and leukemia.
8. Use of the nucleic acids according to claim 3 for preparing a medicament for use in gene therapy for the curing and prophylaxis of diseases as mentioned in claim 6.
9. Antibodies or antibody fragments against epitopes of the compounds according to either of claims 1 or 2.
10. Poly- or oligonucleotides which will hybridize to regions of the cDNA or corresponding RNA under stringent conditions and optionally prevent the expression of coding regions of the genes coding for the compounds according to claims 1 or 2 (antisense compounds).
11. A diagnostic agent containing at least one of the compounds according to claim 9 or 10.
12. A medicament containing at least one of the compounds mentioned in claims 9 and/or 10 in therapeutically effective amounts.
13. Use of the compounds according to claims 9 and/or 10 for preparing a medicament for the treatment of diseases involving too high an expression of the compounds according to claim 1 or 2, or too high an activity of the regions coding for the compounds according to claim 1 or 2.
14. DNA, coding for the compounds mentioned in claim 1 or 2, and/or RNA involved in the transcription or translation of the compounds mentioned in claim 1 or 2.

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